

Title (en)
TREATMENT OF DISEASES CAUSED BY ABNORMAL LYMPHOCYTE FUNCTION WITH AN HDAC6 INHIBITOR

Title (de)
BEHANDLUNG VON DURCH ABNORMALE LYMPHOZYTENFUNKTION VERURSACHTEN KRANKHEITEN MIT EINEM HDAC6-INHIBITOR

Title (fr)
TRAITEMENT DES MALADIES PROVOQUÉES PAR UNE FONCTION LYMPHOCYTAIRE ANORMALE AVEC UN INHIBITEUR D'HDAC6

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Application
EP 14845666 A 20140919

Priority
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• US 2014056584 W 20140919

Abstract (en)
[origin: WO2015042418A1] An HDAC6 inhibitor (a compound of Formula I) is shown to reduce the pathogenesis associated with the B cell mediated autoimmune disease, systemic lupus erythematosus (SLE). Administration of a compound of Formula I attenuated many of the symptoms characteristic of SLE including splenomegaly, abnormal B cell differentiation, an increase in the number double-negative thymic T cells, an increase in the level of auto-antibodies such as anti-dsDNA, immune complex -mediated glomerulonephritis and an increase in inflammatory cytokine production. Treatment with a compound of Formula I also increased the number of the subject's splenic Treg cells while removing circulating auto-antibodies. Inhibition of HDAC6 altered bone marrow B cell differentiation by increasing the percentage of cells in the early-stage developmental fractions of both pro-and pre-B cells. These results demonstrate HDAC6 inhibition with a compound of Formula I can treat SLE disease by altering aberrant T and B cell differentiation.

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